

# Arrow AIRCRAFT Test FMFA, Inc -- Ft Meade, MD (KFME)

Pilot: \_\_\_\_\_

Date: \_\_\_\_\_

Complete this open book questionnaire using the Flight Manual/POH/Checklist. If a question or part of a question is not applicable, write in NA. Your flight instructor will review and grade the questionnaire. Minimum passing score is 80% (No more than 6 wrong). The completed questionnaire will be filed in the pilot's personnel file (PF) by appropriate personnel once the date of this questionnaire has been entered into the FMFA, Inc. Dispatch System.

1. This aircraft contains \_\_\_ fuel drains/sumps and approved fuel grades and colors are \_\_\_\_\_
2. What are the symptoms of carburetor ice for this aircraft? \_\_\_\_\_
3. Total useable fuel under all flight conditions is \_\_\_ gallons, \_\_\_ gallons to tabs, if appropriate.
4. What are the conditions for the fuel selector? ON / OFF / RIGHT / LEFT / BOTH (Circle appropriate)
5. Endurance at 75% power at 6000 ft PA with a 1-hour reserve is \_\_\_ hours with standard conditions.
6. Oil capacity is \_\_\_/\_\_\_ quarts (Min / Max) for flight. **Note: Mechanic recommends 5.5 qts optimum**
7. Air pressure for tires is \_\_\_/\_\_\_ lbs/in<sup>2</sup> (Mains / Nosewheel).
8. The POH Acceptable vacuum gauge readings are \_\_\_ to \_\_\_ in (Hg).
9. The maximum rated power of the engine is \_\_\_\_\_ HP.
10. The aircraft engine is (carbureted, fuel injected). (Circle Appropriate)
11. Magnetos are checked at \_\_\_\_\_ RPM. RPM drop should not exceed \_\_\_\_\_ RPM on either magneto or \_\_\_\_\_ RPM differential between magnetos.
12. Maximum Gross Takeoff Weight is \_\_\_\_\_ lbs.
13. Maximum baggage compartment weight is \_\_\_\_\_ lbs.
14. The ammeter (does / doesn't) indicate battery discharge. (Circle appropriate)
15. The battery for this aircraft is \_\_\_\_\_ volts.
16. Complete table for aircraft depicted below.

FAA Tail No.	N780FM		Color	W/B/R	
Flight Plan Designator	P28R/G		Useable Fuel	72.0	gal
Year of Manufacture	2002		Make/ Model	PA-28R-201	
	#	Weight	Arm	Moment	
Basic Empty	17-August-2015	1826.70	86.860	158661.69	
Fuel (gal)	72.0				
Pilot		200.00			
Copilot		200.00			
Passenger 1		0.00			
Passenger 2		0.00			
Baggage		15.00			
	Weight	Arm	Moment		
Ramp					
Gear Retraction Moment				819.00	
Takeoff					
No Fuel					

17. The aircraft table above indicates that it is (IN / NOT IN) weight & balance limits. (Circle appropriate)
18. The stall warning horn in this aircraft will work without electrical power (YES / NO)
19. When jumpstarting this aircraft, the master should be OFF when cranking the engine (YES / NO)
20. Flaps are hydraulic/electrical/manual (Circle appropriate) with flap settings of \_\_\_\_\_ degrees
21. Slips are not recommended in this aircraft in what configurations? \_\_\_\_\_

**Arrow AIRCRAFT Test**  
**FMFA, Inc -- Ft Meade, MD (KFME)**

Pilot: \_\_\_\_\_

Date: \_\_\_\_\_

22. Give indicated airspeeds in Kts for:

- a.  $V_a$  \_\_\_\_\_@2750 lbs, \_\_\_\_\_@1865 lbs    b.  $V_{so}$  \_\_\_\_\_@40 deg flaps    c.  $V_{s1}$  \_\_\_\_\_    d. Appch Speed \_\_\_\_\_@40 deg flaps    e. Best Glide \_\_\_\_\_  
f.  $V_{NE}$  \_\_\_\_\_    g.  $V_{NO}$  \_\_\_\_\_    h.  $V_{FE}$  \_\_\_\_\_    i.  $V_{LE}$  \_\_\_\_\_    j. Max Landing Gear Retraction Speed \_\_\_\_\_    k.  $V_Y$  gear up, flaps up \_\_\_\_\_  
l.  $V_Y$  gear dn, flaps up \_\_\_\_\_    m.  $V_X$  gear up, flaps up \_\_\_\_\_    n.  $V_X$  gear dn, flaps up \_\_\_\_\_

23. Give the immediate action/memory items for:

- a. Engine failure immediately after takeoff

- b. Engine fire and engine fails to start

- c. Engine fire in flight

- d. Electrical fire in flight

24. Given: PA = 2000 ft; Temp = 30 deg C; RWY 27; Wind 320@12; RWY is paved, level, and dry

Find: Total takeoff distance to clear a 50' obstacle at max takeoff weight \_\_\_\_\_ feet.

25. Given: PA = 2000 ft, Temp = 30 deg C; Wind calm; RWY is paved, level, and dry

Find: Total landing distance to clear a 50' obstacle at max landing weight \_\_\_\_\_ feet

26. Maximum demonstrated takeoff/landing crosswind component is \_\_\_\_\_ KTS/MPH (Circle)

27. Will the maximum demonstrated crosswind component for this aircraft be exceeded for the following: Landing Tipton RWY 28; AWOS radio

reported wind 310@22G30? (YES / NO)

Corrected by: \_\_\_\_\_